Claims

1. An implement controller enabling system for a work vehicle, the work vehicle including a swivel seat having a first position and a second position, and an engine, the implement controller enabling system comprising:

an implement controller capable of being enabled and disabled;

a first seat switch having a first seat switch first state and a first seat switch second state, the first switch entering the first seat switch first state when the swivel seat is substantially in the first position;

a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position;

an ignition switch having a power-on state and a power-off state; and

an implement controller toggle switch capable of being toggled to an implement controller switch first state and a implement controller switch second state, the implement controller being enabled when ideal enablement conditions exist, the ideal enablement conditions existing only when the ignition switch is in the power-on state, the first seat switch is in the first seat switch first state, the second seat switch is in the second seat switch second state and the implement controller toggle switch is toggled to the implement controller switch first state, the implement controller toggle switch being toggled to the implement controller switch first state when the ignition switch is in the ignition switch activation and the first seat switch is in the first seat switch activation state.

2. The implement controller enabling system of claim 1, wherein at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is an electrical switch.

3. The implement controller enabling system of claim 1, wherein the implement controller that is enabled becomes disabled when one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch undergoes a change of state.

4. The implement controller enabling system of claim 1, further comprising a

system override switch for enabling the implement controller under non-ideal enablement conditions, the system override switch having an override switch first state and an override switch second state, the non-ideal enablement conditions existing when the system override switch is put in the override switch first state while the ignition switch is in the power-on state and the ideal enablement conditions do not exist, the implement controller being enabled when the override switch is toggled to the override switch first state in an absence of the ideal enablement conditions.

5. The implement controller enabling system of claim 4, further comprising a monitor, the monitor having an audible signal generator, the audible signal generator emitting an audible signal when the implement controller is enabled in the absence of the ideal enablement conditions.

6. The implement controller enabling system of claim 4, further comprising a monitor, the monitor displaying a message indicating that an override condition exists when the implement controller is enabled in the absence of the ideal enablement conditions.

7. The implement controller enabling system of claim 2, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switches is closed when it is in a controller switch first state and open when it is in a second state.

8. The implement controller enabling system of claim 2, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is open when it is in a first state and closed when it is in a second state.

9. The implement controller enabling system of claim 5, wherein the audible signal generator emits an audible signal when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

10. The implement controller enabling system of claim 6, wherein the monitor displays a message indicating a non-ideal enablement when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

11. An implement controller enabling system for a work vehicle, the work vehicle

including a swivel seat having a first position and a second position; and an engine, the implement controller enabling system comprising:

an implement controller capable of being enabled and disabled;

a first seat switch having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat is substantially in the first position;

a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position;

an ignition switch having a power-on state and a power-off state;

an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state; and

a logic control device for detecting the states of each of the first, second, ignition and implement controller toggle switches and enabling or disabling the implement controller based on the detected, the logic control device enabling the implement controller when an ideal enablement condition exists, the ideal enablement condition existing only when the logic control device contiguously detects the power-on state, the first seat switch first state, the second seat switch second state and the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the power-on state and the first seat switch is in the first seat switch first state.

12. The implement controller enabling system of claim 11, wherein at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is an electrical switch.

13. The implement controller enabling system of claim 11, wherein the logic control device disables an enabled implement controller when one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch undergoes a change of state.

14. The implement controller enabling system of claim 11, further comprising a system override switch for enabling the implement controller under non-ideal enablement conditions, the system override switch having an override switch first

state and an override switch second state, the non-ideal enablement conditions existing when the system override switch is put in the override switch first state while the ignition switch is in the power-on state and the ideal enablement conditions do not exist, the logic control device enabling the implement controller under non-ideal enablement conditions.

15. The implement controller enabling system of claim 14, further comprising a monitor having an audible signal generator, the logic control device causing the audible signal generator to emit an audible signal when the implement controller is enabled in an absence of the ideal enablement conditions.

16. The implement controller enabling system of claim 14, further comprising a monitor, the logic control device causing the monitor to display a message indicating that an override condition exists when the implement controller is enabled in an absence of the ideal enablement conditions.

17. The implement controller enabling system of claim 12, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is closed when it is in a first state and open when it is in a second state.

18. The implement controller enabling system of claim 12, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is open when it is in a first state and closed when it is in a second state.

19. The implement controller enabling system of claim 15, wherein the logic control device causes the audible signal generator to emit an audible signal when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

20. The implement controller enabling system of claim 16, wherein the logic control device causes the monitor to display a message indicating a system fault when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

21. A work vehicle comprising:

a swivel seat having a first position and a second position

and an implement controller enabling system, the implement controller enabling system comprising:

an implement controller capable of being enabled and disabled;

a first seat switch having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat is substantially in the first position;

a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position;

an ignition switch having an ignition switch first state and an ignition switch second state;

an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state; and

a logic control device for detecting the states of each of the first seat switch, second seat switch, ignition switch and implement controller toggle switch and enabling or disabling the implement controller based on the states detected, the logic control device enabling the implement controller when ideal enablement conditions exist, the ideal enablement conditions existing only when the logic control device contiguously detects the ignition switch first state, the first seat switch first state, the second seat switch second state and the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state, the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch second state.

22. The work vehicle of claim 21, wherein at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is an electrical switch.

23. The work vehicle of claim 21, wherein the logic control device disables an enabled implement controller when one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch undergoes a change of state.

24. The work vehicle of claim 21, further comprising a system override switch for

enabling the implement controller under non-ideal enablement conditions, the system override switch having an override switch first state and an override switch second state, the non-ideal enablement conditions existing when the system override switch is put in the override switch first state while the ignition switch is in the ignition switch first state and the ideal enablement conditions do not exist, the logic control device enabling the implement controller under the non-ideal enablement conditions.

25. The work vehicle of claim 24, further comprising an audible signal generator, the logic control device causing the audible signal generator to emit an audible signal when the implement controller is enabled in an absence of the ideal enablement conditions.

26. The work vehicle of claim 24, further comprising a monitor, the logic control device causing the monitor to display a message indicating that an override condition exists when the implement controller is enabled in an absence of the ideal enablement conditions.

27. The work vehicle of claim 22, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is closed when it is in a first state and open when it is in a second state.

28. The work vehicle of claim 22, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is open when it is in a first state and closed when it is in a second state.

29. The work vehicle of claim 25, wherein the logic control device causes the audible signal generator to emit an audible signal when the implement controller toggle switch is toggled to the controller switch first state while the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

30. The work vehicle of claim 26, wherein the logic control device causes the monitor to display a message indicating a non-ideal enablement when the implement controller toggle switch is toggled to the controller switch first state while the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

31. The implement controller enabling system of claim 1, wherein the implement controller is a joystick.

32. The implement controller enabling system of claim 21, wherein the implement controller is a joystick.

33. The work vehicle of claim 31, wherein the implement controller is a joystick.

34. An implement controller enabling system for a work vehicle, the work vehicle including a swivel seat having a first position and a second position, and an engine, the implement controller enabling system comprising:

a implement controller capable of being enabled and disabled;

at least one seat switch having at least one state indicating the swivel seat is in one of the first position, the second position and a third position, the third position being between the first position and the second position;

an ignition switch having an ignition switch first state and an ignition switch second state; and

an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state, the implement controller being enabled when ideal enablement conditions exist, the ideal enablement conditions existing only when the ignition switch is in the ignition switch first state, the at least one seat switch indicates that the seat is substantially in the first position and not in the second position or the third position, and the implement controller toggle switch is toggled to the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the at least one seat switch is indicating that the seat is substantially in the first position and not in the second position or the third position.

35. The implement controller enabling system of claim 34, wherein the implement controller is enabled when non-ideal enablement conditions exist, the non-ideal enablement conditions existing when the implement controller toggle switch is toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the means for seat position detection indicates the swivel seat is not in the first position.

36. The implement controller enabling system of claim 35, wherein the implement

controller is enabled when non-ideal enablement conditions exist, the non-ideal enablement conditions existing when the implement controller toggle switch is toggled to the controller switch while the ignition switch is in the ignition switch first state and the means for seat position detection indicates the swivel seat is in one of the second position and the third position..

37. The implement controller enabling system of claim 35, wherein the at least one seat switch comprises:

a first seat switch having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat is substantially in the first position; and

a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch second state when the seat switch is substantially in the second position.

38. The implement controller enabling system of claim 37, wherein the swivel seat is substantially in the first position when it is angularly within 15° of the a backhoe operating position.

39. The implement controller enabling system of claim 37, wherein the swivel seat is substantially in the second position when it is angularly within 15° of the a loader operating position.

40. An implement controller enabling system for a work vehicle, the work vehicle including a swivel seat having a first position and a second position, and an engine, the implement controller enabling system comprising:

an implement controller capable of being enabled and disabled;

means for seat position detection detecting whether the swivel seat is in one of the first position, the second position and a third position, the third position being between the first position and the second position;

an ignition switch having an ignition switch first state and an ignition switch second state; and

an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state, the implement controller being enabled when an ideal enablement condition exists, the ideal enablement condition

existing only when the ignition switch is in the ignition switch first state, the means for seat position detection detects the first position and not the second position, and the implement controller toggle switch is toggled to the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the means for seat position detection is detecting the first position and not the second position.

41. The implement controller enabling system of claim 40, wherein the implement controller is enabled when the implement controller toggle switch is toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the means for seat position detection is detecting one of the second position and the third position.

42. The implement controller enabling system of claim 40, wherein the implement controller is enabled when the implement controller toggle switch is toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the means for seat position detection is not detecting the first position.

43. The implement controller enabling system of claim 4, wherein the override switch comprises the implement controller toggle switch.

44. The implement controller enabling system of claim 14, wherein the override switch comprises the implement controller toggle switch.

45. The implement controller enabling system of claim 24, wherein the override switch comprises the implement controller toggle switch.